## Operation Outline for ST 1

ST 1 contains an acid sludge consisting of a black organic sludge, a light green (acidic) crystal and a strong liquid acid. The majority of the liquid has been previously removed to totes via a valve on ST 1. Additional material was removed by opening the door to ST1 and letting the material drop into a modified tote. A double diaphragm pump removed the liquid to the totes.

We will continue to remove liquid materials as they flow out of the access way into the modified totes. After liquid removal, the black sludge layer will be manually pulled through the door into the modified totes. This material will be slurried with the bean pump and pumped, using the double diaphragm pump with an acid resistant strainer, into 55 gallon poly drums. Extended rakes and hoes will aid the movement of the sludge to the access way and modified totes. Additional modified totes will be available if the material becomes hard to slurry or if solid material needs to be removed and drummed, as detailed below. The crew will remove as much material as possible through the current access door, before the execution of the door sheet.

An entry way consisting of a door sheet approximately 6 by 6 feet will be cut into ST 1 utilizing a pneumatic nibbler. The same procedure as above will be utilized from this door sheet to remove the black sludge.

Alternative Method: Instead of doing the door sheet, ST 1 will be evaluated for a confined space entry. Level of protection and PPE will be determined by Health and Safety. Staffing will consist of 2 entrant, hole watch, 2 rescue, hole watch supervisor. Entrants will push sludge to the totes as outlined.

The crystalline material will be pulled to the modified totes and shoveled into drums. Drums will be placed inside the containment with the overhead lift. The drum will be labeled and place on pallets and removed from the area. After removal of the solids ST 1 will be rinsed.